

Preface

The computerization of legal turnover, legal drafting and the application of law is gradually making them dependent on information technology. This justifies the importance of a number of considerations concerning the technological dimension of legal practice. Given the potential benefits and risks associated with the progressive digitalization and computerization of legislation and the growing importance of the Internet, the issue of the role and uses of information systems in the legal domain requires careful, multi-dimensional analysis.

The impact of information technology on law is still an open question. However, there is no doubt that these technologies are changing the way in which law is created, communicated, applied and interpreted, since they provide new ways of sharing, searching, communicating and analyzing legal information. Communication imposes on human practices and, in particular on legal practices, many specific requirements and restrictions. Therefore, the implementation of new technologies into communication processes can not only help to overcome some traditional problems, such as allowing, for instance, the improvement of existing practices, but it may also cause new problems or make old ones even graver. For example, the development of information technologies may result in the creation of new goods and services, or may change the scope or the field of application of traditional ones. It makes new risks appear, requiring the reinterpretation of existing rules or the introduction of new regulations. However, the need for the reinterpretation of existing law infringes upon its certainty and the introduction of new regulations is costly and complicated. Moreover, inaccurate regulation may have far reaching consequences both for legal systems and existing or future social practices. Thus, one can argue that law, information technologies and social practices are increasingly mutually dependent. Therefore, understanding the causes, trends and significance of the changes resulting from the implementation of information technology in processes related to the creation and ap-

plication of law is only possible through interdisciplinary research conducted jointly by representatives of various sciences, in particular by computer scientists and lawyers.

This book constitutes the result of a project, whose aim was to bring together computer scientists, legal theoreticians and practitioners and to reflect jointly on how information technologies can be used in legal practice and what changes they may bring to it. The book consists of 9 chapters which analyze various aspects of the computerization of law and the legal problems resulting from developments in IT.

In Chapter 1 Jacek Janowski analyses, how information technology and the Internet in particular can influence law and its axiology. On this basis, he claims that technological development is responsible for the destabilization of law, questioning various positions including classical legal positivism. As a result, a new global and network-related legal culture is developing, called Internet legal culture.

In Chapter 2 Janusz Opila and Tomasz Pełech-Pilichowski outline the basic problems of the storage and presentation of information in the context of coding of the meaning of words and signs. They also discuss selected problems connected with the permanent preservation of data and information stating its relevance for legal text processing. Due to this discussion they claim that the storage and presentation of information is a problem of the digitalization of meaning.

In Chapter 3 Jerzy Duda discusses XML models for legal documents, focusing on the problem of development of a single national XML standard for legal purposes and its compatibility with transnational standards. He presents basic concepts related to the application of XML language in the legal domain and selected examples of XML Schemas for national and transnational legal systems. On this basis, he outlines the development of XML legal standard in Poland and analyses its compatibility with transnational standards.

Chapter 4 presents new possibilities for the similarity analysis of legal documents. Piotr Potiopa compares various methods of the semantic analysis of legal texts, showing, how they can improve the quality of information provided by lawyers. Based on a presentation of selected methods used in text similarity analysis, he shows that analysis of legal documents using semantic relations of lexical units existing in WordNet gives better results than those where semantic relations are not taken into account.

Chapter 5 addresses the issue of changes in the consolidation of legal information resulting from digitalization of legal documents. It outlines how on-line promulgation changes legislative practices related to the management of legal documents. In particular, the problem of the automation of the consolidation of electronic legal documents is presented. On this basis, Wojciech Cyruł analyses the question of whether the more frequent promulgation of

authentic consolidated versions of legal texts is able to deal with the reduced clarity of legal texts which results from their numerous and extensive novelizations.

In Chapter 6 Fryderyk Zoll analyses the potential impact of the hyperlinking of different parts of a code on the pandectistic structure of legal texts. He argues that new technology enables a new form of presenting legal texts, facilitating their usage. Based on the example of the *Acquis Principles* he presents the concept of “mirror structure” and argues that the *Acquis Principles* may prove their full functionality only if displayed in three dimensions.

Chapter 7 explores the impact of information technology and social media on the channels of participation and democracy in the Swedish model of labour law, where the social partners are in essence given a law-making function through collective agreements. Laura Carlson describes the Swedish labour law model, then the relationship between the social partners and their members. The use of information technology and social media is then described, with the conclusion addressing the issue of whether this use exacerbates the distinction between the insiders and outsiders of the model, enhancing or restricting democracy in the work place.

Chapter 8 discusses the legal status of consumers in digital content contracts concluded over the Internet in EU law. It presents legal problems resulting from the development of e-commerce and the appearance of new types of goods and new ways of selling products and services. Agnieszka Kubiak-Cyrul outlines current EU regulations concerning consumer protection and presents the difficulties in this area resulting from the lack of regulation which recognises the particular nature of digital content.

Finally, in Chapter 9, Lorenz Schulz discusses the impact that the acceleration resulting from digitalisation may have in criminal law. Based on legal and philosophical investigations he argues that this acceleration especially influences the concept of imputation in substantial criminal law and claims that, in criminal trials, acceleration can lead to the infringement of the rights of the suspect in favour of the economy of prosecution.